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feedback; in the tracking condition, the phase lag relative to stimulus position increases as perceived coherence decreases. Altogether, the results suggest that active behaviour does not facilitate the spatiotemporal binding of component motions and are not compatible with the view that vision-for-perception and vision-for-action are processed independently through distinct cortical pathways.

◆ **Motor and visuospatial asymmetries: Which come first?**

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According to a classical explanation, asymmetries of motor habits determine the asymmetries of visual space. Evidence recently collected by Marino and Stucchi (2001 *Perception* 30 Supplement, 25) that the left–right asymmetry of visuospatial representation is driven by handedness seems to support this explanation. Nevertheless, since handedness is not directly manipulated, the critical account that the presence of asymmetries in visual space is not the results but the origin of motor asymmetries cannot be excluded. To test this possibility, we compared blind and blindfolded left-handers and right-handers, in tabletop line retracing task. Participants were required to draw on a digitiser tablet lines with free length and orientation. As they complete each line production they had to return to the starting position running the pen over the way previously covered. Asymmetries in the line production as well as in the line reproduction were found for both blind and blindfolded participants. The result that the performance in the line retracing task is asymmetric even for individuals who cannot visually represent external space indicates that motor asymmetries are prior to visuospatial asymmetries.

◆ **Action-related intentional effects in a visual search task**

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The aim of the current study was to test if visual features relevant to the task are processed more efficiently at an early, presumably parallel, level, compared to irrelevant target features. Subjects either had to grasp or point at a target. It was hypothesised that since orientation, in contrast to colour, is relevant to the action of grasping, enhancement of orientation-discrimination performance should be selective. The visual search task required searching for a conjunction of a particular colour and orientation. Subjects viewed stimuli on a screen while their gaze was tracked to determine the targeting of the first saccade. Target–distractor discriminability and set size were manipulated. In experiment 1, the difficulty of colour and orientation search was matched so that subjects would make 50% errors in feature search. In experiment 2, the colour contrast of target and distractors was decreased. There were two levels of set size of the search display. Enhanced orientation discrimination (relative to colour) was found for the condition in which subjects grasped the target compared to the condition in which they pointed towards the target. The action effect was most prominent in the small set-size, high-discriminability condition, and weakest in the large set-size, low-discriminability condition, with intermediate effects for the other two conditions. Action intention selectively enhances the processing of a behaviourally relevant feature. Signal detection modeling indicates that our results can be explained on the basis of an enhancement of an early and possibly parallel stage of feature processing.

◆ **Saccadic adaptation influences pointing localisation of transient stimuli**

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Visual localisation during saccadic eye-movements is severely distorted: a vertical bar briefly flashed just prior to a saccade is perceived close to the saccadic target. However, if subjects point blindly to the bars, they respond correctly (Burr et al, 2001 *Current Biology* 11 798–802). Another case of visual mis-localisation occurs under conditions of short-term saccadic adaptation, when the saccade target steps in a stereotypical way during the eye movement; after a few trials the eye moves straight to the final position of the target. Perceptual mis-localisation during conditions of saccadic adaptation takes place for targets presented peri-saccadically, but also for targets presented up to 400 ms before the saccade. Here, we study whether motor adaptation of eye movements can also alter localisation of objects by pointing. We measured localisation by blind pointing during fixation, normal saccade, and adapted saccade for bars presented for 4 ms well before a saccadic eye movement. Localisation performance for transient bars during fixation is linear, but not veridical, indicating an effect of gaze position on pointing. Executing a normal